St. Elizabeth's Hospital in Washington.

The researchers ran the same fluorescent antibody test on the blood sera from the patients at St. Elizabeth's. The results were the same, indicating the bacterium was the same in both cases. How the piece fits into the puzzle is still unanswered, but researchers are running tests on other sera in search of similar results.

Epidemiologists also hope that the location of other penumonia cases in the vicinity of the convention-goers' hotels will guide them to the bacterium's origin. The exact time and location of exposure must be established and a blood sample must be procured and tested before any positive statements about the geographical distribution of the disease can be made. Besides the logistical difficulties involved in tracking down the blood samples and the correct information about exposure researchers fear that the publicity surrounding the disease may have interfered with routine sampling procedures. In face of the odds, however, the CDC staff will still be plugging away at the cause and identification of the Legionnaires' disease for the next few months. □

Cambridge may O.K. gene research

After months of stormy debate, the city council of Cambridge, Mass., is near a decision on regulation of genetic research using spliced genes, or recombinant DNA. This week the council narrowly passed, on a preliminary vote, an ordinance permitting moderate-risk research, but imposing safeguards somewhat more stringent than those required by the National Institutes of Health (SN: 6/3/76, p. 3). The ordinance must now be published and public hearings completed. The final council vote on the ordinance and any amendments will occur on Feb. 7, which is also the last day of a seven-month city moratorium on moderate-risk genetic research.

The proposed ordinance is the product of a committee of Cambridge citizens. This eight-member review board, appointed by the city manager, includes a former Cambridge mayor and businessman, medical personnel, an engineer, a professor of urban policy and community activists. They spent more than 100 hours learning about research techniques, studying the NIH guidelines, visiting laboratories and listening to scientists debate. They then reached a unanimous decision.

The controversial research in question is a class of experiments that the NIH guidelines designate moderate risk. These experiments include splicing the genes of a virus or bacteria to partially purified DNA from mammals or birds or from lower animals known to produce potent toxins or pathogens. The Massachusetts Institute of Technology has a laboratory for cancer research that meets the NIH requirements for such work. The issue of recombinant DNA research first came to the attention of Cambridge mayor Alfred Vellucci last June when Harvard undertook construction of such a P3 facility.

In a report presented Jan. 5, the citizens' committee recommended that moderate-risk genetic research, both in profit and nonprofit institutions, be permitted in Cambridge as long as it conforms to the NIH guidelines. The board further stipulated that institutions using recombinant DNA must train all laboratory personnel in appropriate safety procedures; include representatives of both laboratcry technicians and the community on biohazards committees; test the purity of experimental organisms and check for resistance to common antibiotics, and monitor the health and intestinal flora of laboratory workers. The committee also specified that all experiments requiring P3 laboratories use genetically crippled bacteria and viruses (ensuring that no more than one spliced gene in one hundred million will survive outside a carefully regulated laboratory environment). Finally, the committee proposed that Cambridge establish a biohazards committee to oversee all recombinant DNA research. The biohazards committee would review proposals for recombinant DNA research in the city, receive reports of violations, visit laboratories, modify the city safety requirements as the federal guidelines evolve, and examine reports of the institutional biohazards committee.

Scientists, both those opposing and favoring city regulation of the research, praised the work of the citizens' committee. Although some think the extra stipulations are unnecessary, they do not consider them a major problem. Harvard and MIT are preparing responses, expected to express willingness to comply with the proposed ordinance.

Phillip Sharp, an MIT biologist who hopes soon to do P3 experiments in his own research, called the report of the review board "superb." He told SCIENCE NEWS: "I am encouraged that laymen would take time to do the homework, and that they considered the need for research and realized risk is involved in all research. The laboratory research board went through all of it and came out with a very intelligent report."

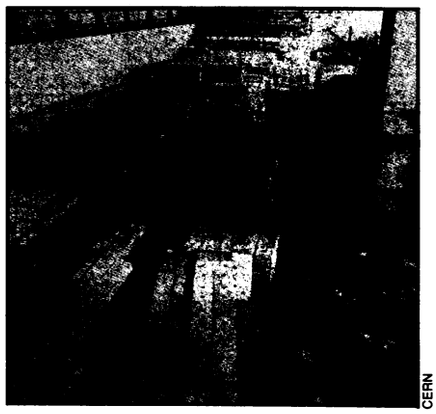
Jonathan King, another MIT researcher, praised the committee's strong statement on citizen control, but thought the report should have been more explicit. "It lacks teeth, it lacks a mechanism of enforcement," he says. He feels that experiments assigned to a lower risk category by NIH should also be regulated under the ordinance. The ordinance may be amended before final passage to make it stronger, King says. Some Harvard laboratory employees, a group not consulted by the citizens' committee, have written to the city council with a number of recommendations.

The final passage of the ordinance would set two important precedents. The first is the decision not to ban the moderate-risk research, but to regulate it locally. Other city and state governments, including the New York Attorney General's office, are following developments in control of research using recombinant DNA.

The other precedent is the success of a committee of lay citizens in tackling a highly technical and controversial topic and emerging with concrete and intelligent recommendations.

"In presenting the results of our findings we wish also to express our sincere belief that a predominantly lay citizen group can face a technical scientific matter of general and deep public concern, educate itself appropriately to the task and reach a fair decision," the citizens' committee wrote. "Decisions regarding the appropriate course between the risks and benefits of potentially dangerous scientific inquiry must not be adjudicated within the inner circles of the scientific establishment." □

400-GeV experiments begin at Geneva



Overview of SPS West Experimental Hall.

On January 7, with the feeding of the first 400-billion electron-volt (400-GeV protons to the West Experimental Area of the Super Proton Synchrotron, Western Europe's CERN laboratory entered the newest range of high-energy physics. The laboratory, owned and operated by a consortium of West European nations, also operates the 30-GeV Proton Synchrotron and the Intersecting Storage Rings, the world's most energetic colliding-beam apparatus for protons.

The Super Proton Synchrotron, which straddles the French-Swiss border near Geneva, is in many ways a companion piece to the 500-GeV synchrotron at the United States's Fermi National Accelera-